

09/622401

533 Rec'd PCT/PT 16 AUG 2000

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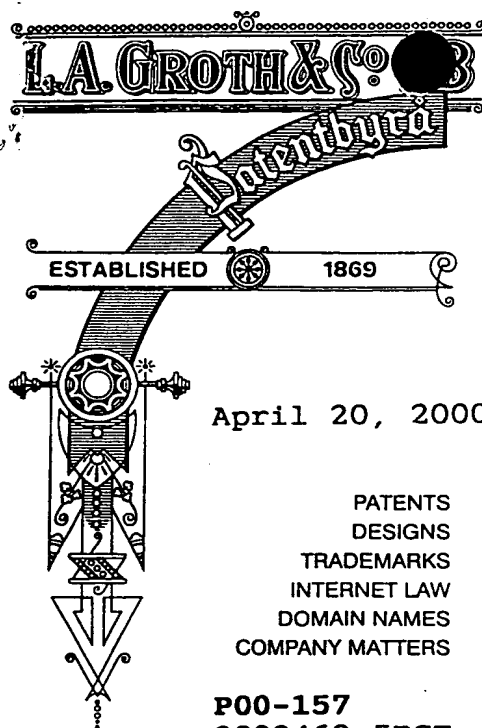
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April 20, 2000

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P00-157
 9800462-5PCT

Patent- och Registrerings-
 verket

Box 5055
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COPY

Re.: International Patent Application Serial Number
 PCT/SE99/00145
 Applicant: MARTIN, Hans Göran Evald et al Sweden
 Title: A Method of Producing a Detector Belonging
 to a Gas Sensor and a Detector Produced in
 Accordance with the Method.

Dear Sirs.

We have duly received the first Written Opinion, according to PCT Rule 66, issued February 24, 2000 and we herewith submit our written reply, accompanied by new claims in order to more precisely state the novel features related to the present invention.

In the written reply, mentioned above, the Examiner has made a reasoned statement under Rule 66.2(a)(ii) with regard to the categories; Novelty (N), Inventive Step (IS) and Industrial Applicability (IA) and further made citations and explanations supporting the statement thus made.

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The Examiner has in this respect made the statement that under category Novelty claims 1 to 52 have a positive evaluation; under category Inventive Step Claims 10 and 36 have a positive evaluation and that claims 1 to 9, 11 o 35 and 37 to 52 have a negative evaluation and that under category Industrial Applicability Claims 1-52 have a positive evaluation.

We can not fully agree with the finding stated above and before we more clearly evaluate the significant features related to the present invention in the light of the prior art cited we state our comments on the prior art and concentrate on the parts that can be seen as most relevant when it comes to compare with the significant features related to the present invention.

DE-A1-4 110 653.

This publication discloses a thermoelectric transducer device comprising a matrix of thermocouples on a three dimensional substrate. This publication also discloses a method for manufacturing the device by deposition of metals from different angles onto the substrate with a topographic surface structure possessing a number of parallel ridges. The surface structure of the substrate works as a mask during the deposition of metals from different angles and thereby makes it possible to simultaneously produce a large number of thermocouples in a matrix.

This publication discloses further the features that the thermocouples are arranged onto a substrate (7) covered by a material. The substrate (7) consists of a material having electrically insulating and heat conductive properties, and as examples are mentioned ceramic materials or silicon nitrid covering a silicon base.

The present invention makes use of a replica of a master and the base structure (B) is thus a plastic material.

The basic concept related to the present invention is that the used gas cell (2) is a combination of a first part or component (2A) and a second part or component (2B), where the last mentioned component is a flat plate (B) section or a base structure.

It is to be noted that the second component (2B) is a surface section of the total surface area available on the surface of said base structure (B).

In order to clarify the novel features related to the present invention and to point out that the gas cell consists of two parts to form its cavity we now file new claims, intended as a base for a re-examination of the invention at hand.

As we do agreed that the present invention also makes use of the technique of forming a thermoelectric transducer device onto a topographic surface structure and we have entered this features into the preamble of claim 1 and claim 27.

If a person, skilled in this technical field, aware of the prior art cited in this application and having a general knowledge of combining features revealed to him, facing the technical problems mentioned in the introductory part of the above captioned patent application, shall come to the solution suggested by the present invention he must not only make technical considerations by realising the measures and/or the sequence of measures that must be undertaken but also make technical considerations by realising with means, new or available, is/are required in solving these technical problems but he/she must make these technical considerations in an environment where patentable merits are required.

We herewith respectfully request a re-examination of the merits based upon the above stated argumentation and the claims now filed.

It is our hope that in the light of the above stated there can be a possibility for the invention at hand to be regarded as patentable by a positive evaluation of all the categories Novelty (N); Inventive Step (IS) and Industrial applicability (IA).

The specific features mentioned in the preamble of claim 1 clearly stated the technical field to which the present invention refers to and includes the features already known in the prior art.

The specific features mentioned in the characterising part of claim 1 are new, at least in relation to the characteristic features revealed in the cited publication. There is an adequate reason to give a positive opinion regarding all criteria for patentability since the stated arrangement and dimensioning in the claims cannot be considered to be a measure near at hand as the teachings related to the prior art are more directed away from the basic concept of and the teachings significant for the present invention than towards it.

If it should be that the application can be accepted after minor corrections in the claims and/or description we suggest that such minor corrections are introduced after a more informal telephone contact with the undersigned attorney.

In the case that the Authority, regardless of the above stated opinions and considerations, still can find a reason to give a negative opinion in any respect, such as Inventive step (IS), regarding a protection by a patent for the applicant according to the herewith filed claims, we would appreciate and respectfully apply for and request an ORAL HEARING or CONFERENCE with the Examiner, in order to hereby verbally further explain the technical advantages pertaining to the invention and

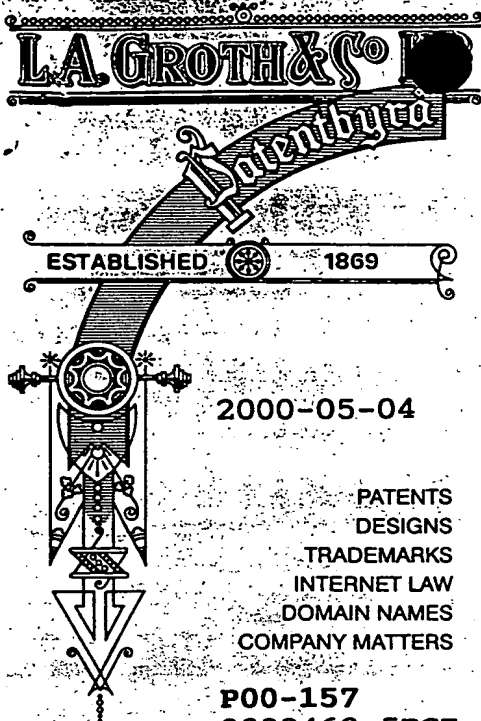
the steps and measures required to arrive at the inventive concept from the standpoint of the prior art.

Respectfully submitted.

Erik J. Lindblom.



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2000-05-04

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Title: A Method of Producing a Detector Belonging
to a Gas Sensor and a Detector Produced in
Accordance with the Method.

Dear Sirs.

This is to acknowledge the telephone call from Examiner
Jonas Andersson in the above identified International
Patent Application in which he expressed his view of the
claims filed April 20, 2000.

It was especially pointed out that claims 1 and 27 must
be amended to more clearly state the features related to
the used thermal element by clearly state the use of
first and second electrically conductive metal layers.

We have accepted this view and enclosed you will find
new claims amended as requested.

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This amendment of claim 1 does not cover the Bolometer related detector-arrangement, as previously stated in claim 2, as this embodiment does need one electrically conductive metal layer only.

We have entered a new method claim 27 and a detector related claim 54 directed to the Bolometer application of the present invention.

It is now respectfully requested the acceptance of the claims filed and we are awaiting a positive evaluation of the criteria Novelty, Inventive Step and Industrial Applicability.

Respectfully submitted.

Erik J. Lindblom.

